

## VARIABLE GAIN AMPLIFIER FOR LOW SUPPLY VOLTAGE SYSTEM

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**Inventor:** BETTI GIORGIO; MOLONEY DAVID; PORTALURI SALVATORE  
**Applicant:** SGS THOMSON MICROELETTRONICA SPA  
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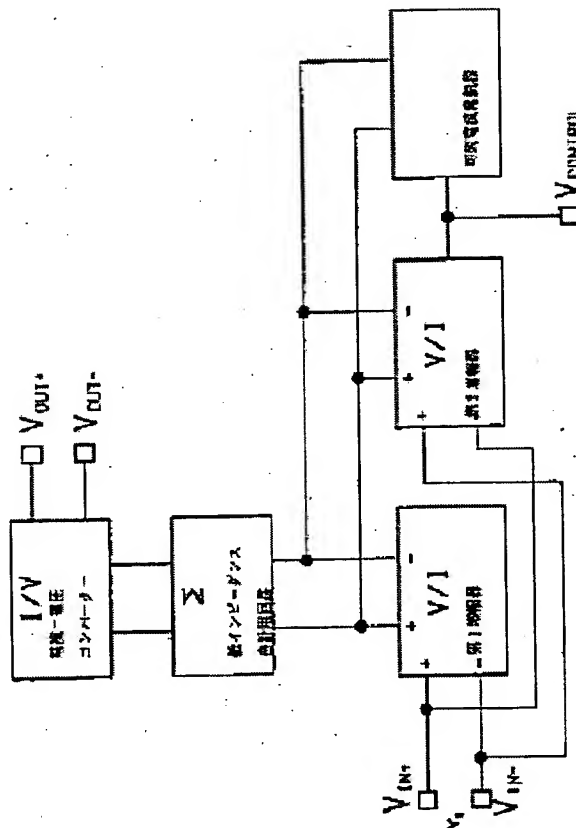
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## Abstract of JP6326536

**PURPOSE:** To provide a variable gain amplifier provided with high dynamic characteristics and a wide frequency band, operated by a low voltage combining output signals which are generated by first and second amplifiers and a variable current oscillator and converting them by a converter.

**CONSTITUTION:** This variable gain amplifier VGA is composed of a first voltage- current (V/I) amplifier, provided with a fixed gain and a second V/I amplifier provided with a variable gain operated in parallel with a first amplifier. Then, the output currents of the first and second amplifiers are totaled in a circuit for totaling and third current signals generated by the variable current oscillator driven by a control voltage VCONTROL are totaled as well. Then, the circuit &Sigma; for totaling is used among three circuit blocks and a current-voltage converter (I/V) and supplies a low impedance node for totaling the output currents. Thus, the I/V converter converts the total of the output current signals of the three blocks into voltage signals.



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